

Notes on sky conditions at Blue Hill

Date and time from apparent noon	Wind	Visi- bility	Sky blue- ness	Clouds, etc., and remarks
<i>April 1934</i>				
2, 2:57 p.	SW & W	8	3	Few Ci.; moderate haze.
3, 1:01 p.	NNW 4-5	8	3	Few Ci.; mod. hz. & smk.
3, 2:42 p.	NNW 5	8	4	Smoke in valley.
5, 2:20 a.	N 3-4	8-9	3	City smk. in NW & SW.
5, 0:47 p.	NE & N 2	8	4	0 clds.; mod. hz. in SW & W.
5, 3:13 p.	NE & N 1-2	8	4	Smk. & hz. in SW & W.
5, 3:29 p.	ENE 1	8	3	Mod. hz.
8, 2:05 a.	N & NW 5-6	8	4	Mod. hz.; 2 Cu Stcu. & Frcu. interfered.
8, 0:54 p.	NW 5	8	4	3 Cu., Frcu. (not near sun).
8, 2:50 p.	NW 3	10	4	Few Ci., Cu., Frcu.; very clear.
9, 1:42 a.	WNW 6	7	4	0 clds.; mod. hz.; harbor invisible.
9, 0:47 p.	W 7	7	4	Few Ci., Cu. (possibly Ci. over sun).
9, 2:56 p.	W 7	7	4	Few Ci., Cu.; thin Ci. over sun.
10, 1:31 a.	ESE 3	8	4	Few Ci.; mod. hz.
10, 0:53 p.	ENE 4	8	4	Few Cist.; in W & N visibility 7.
10, 3:52 p.	NE 5	8	4	Few Cist.; (hz. & smk.; reduced vis. in W.)
11, 2:03 a.	NE 4	8	4	Ci. coming on rapidly; hz. over Boston.
15, 2:26 a.	NW & N 1-2	8	3	Cu. & Frcu. forming rapidly.
18, 2:19 a.	NW & W 2	8	3	Lt. hz.; excellent sky.
18, 0:58 p.	E 1	8	3	No clds.
18, 3:49 p.	W 3	8	3	Few Cist.; some smk. in W & SW.
19, 2:16 a.	SSE 4	8	3	Few Acu.
21, 2:27 a.	NW & N 2	8	3	Few Frcu. & Cu. near sun.
22, 3:53 p.	NW 6	8	3	Few Frcu. & Cu. in E.
24, 0:46 p.	SSW 9	8	6	Few Cu., Frcu.
24, 3:58 p.	S 9	8	4	Few Ci., Acu., Cu.; poor conditions.
25, 2:10 a.	W 4-5	8	4	0 clouds.
25, 0:42 p.	NW & W 4	8	4	Few Ci., Cist. (clouds stopped obs'ns.).
26, 1:55 a.	SW 3-4	8	4	Cist. in N; conditions good.
29, 3:01 a.	NW 2	9	4	0 clouds.
29, 0:23 p.	SW & W 2	8	4	0 clouds; conditions good.
29, 3:22 p.	SE & S 2	8	6	Do.
30, 3:00 a.	SW & S 4-5	8	4	0 clouds; conditions excellent.
30, 1:05 p.	SW & S 5-6	8	4	Ci. low in S & SW; lt. hz.

POSITIONS AND AREAS OF SUN SPOTS

[Communicated by Capt. J. F. Hellweg, U.S. Navy, Superintendent U.S. Naval Observatory. Data furnished by the U. S. Naval Observatory in cooperation with Harvard and Mount Wilson Observatories. The difference in longitude is measured from the central meridian, positive west. The north latitude is positive. Areas are corrected for foreshortening and are expressed in millionths of the sun's visible hemisphere. The total area for each day includes spots and groups.]

Date	Eastern stand- ard time	Heliographic			Area		Total area for each day	Observatory
		Diff. in longi- tude	Longi- tude	Lat- tude	Spot	Group		
1934								
	<i>h. m.</i>	<i>°</i>	<i>°</i>	<i>°</i>				
Apr. 1	11 58	No spots						U.S. Naval.
Apr. 2	11 7	No spots						U.S. Naval.
Apr. 3	11 20	+30.0	187.1	+29.0		46	46	U.S. Naval.
Apr. 4		No spots						Harvard.
Apr. 5	11 34	No spots						U.S. Naval.
Apr. 6	11 14	No spots						U.S. Naval.
Apr. 7	14 1	No spots						U.S. Naval.
Apr. 8	11 10	No spots						U.S. Naval.
Apr. 9		No spots						Harvard.
Apr. 10	11 12	No spots						U.S. Naval.
Apr. 11	9 45	No spots						Mount Wilson.

POSITIONS AND AREAS OF SUN SPOTS—Continued

Date	Eastern stand- ard time	Heliographic			Area		Total area for each day	Observatory
		Diff. in longi- tude	Longi- tude	Lat- tude	Spot	Group		
1934								
	<i>h. m.</i>							
Apr. 12	9 30	No spots						Mount Wilson.
Apr. 13	9 50	No spots						Mount Wilson.
Apr. 14	11 31	No spots						U.S. Naval.
Apr. 15	11 5	-80.0	278.9	-28.5		185	185	U.S. Naval.
Apr. 16	14 3	-67.0	277.0	-28.5		309	309	U.S. Naval.
Apr. 17	12 40	-53.0	278.7	-29.8		1320	1320	Harvard.
Apr. 18	11 6	-42.0	277.3	-29.0		710	710	U.S. Naval.
Apr. 19	12 40	-26.8	278.5	-30.0		950	950	Harvard.
Apr. 20	10 13	-16.0	277.3	-29.0		617	617	U.S. Naval.
Apr. 21	11 2	-10.5	269.2	-29.5		93		U.S. Naval.
		-0.5	279.2	-28.0	432		525	U.S. Naval.
Apr. 22	11 0	+1.5	268.0	-29.5		93		U.S. Naval.
		+12.5	279.0	-29.0	432		525	U.S. Naval.
Apr. 23	11 1	+12.5	265.8	-29.5		31		U.S. Naval.
		+25.5	278.8	-29.0	432		463	U.S. Naval.
Apr. 24	11 5	+39.0	279.0	-29.0	340		340	U.S. Naval.
Apr. 25	11 8	+51.0	277.8	-29.0	340		340	U.S. Naval.
Apr. 26	13 11	+64.5	276.9	-29.0	309		309	U.S. Naval.
Apr. 27	9 50	+26.0	227.0	+27.0		12		Mount Wilson.
		+76.0	277.0	-29.0	590		602	Mount Wilson.
Apr. 28	11 1	No spots						U.S. Naval.
Apr. 29	12 58	No spots						U.S. Naval.
Apr. 30	10 44	No spots						U.S. Naval.
Mean daily area for 30 days							241	

NOTE.—Harvard Observatory reported that there were no spots on Feb. 19, 1934.

PROVISIONAL SUN-SPOT RELATIVE NUMBERS FOR APRIL 1933

(Dependent alone on observations at Zurich and its station at Arosa)

[Data furnished through the courtesy of Prof. W. Brunner, Eidgenössische Sternwarte, Zurich, Switzerland]

April 1934	Relative numbers	April 1934	Relative numbers	April 1934	Relative numbers
1	0	11	0	21	22
2	11	12	0	22	b 18
3	12	13	0	23	16
4	9	14	d 7	24	19
5	8	15	21	25	11
6	0	16	33	26	10
7	0	17	32	27	16
8	0	18	29	28	14
9		19	22	29	7
10	0	20	21	30	0

Mean: 29 days=11.7.

b= Passage of a large group or spot through the central meridian.

d= Entrance of a large or average-sized center of activity on the east limb.

AEROLOGICAL OBSERVATIONS

[Aerological Division, D. M. Little, in Charge]

By L. T. SAMUELS

Free-air temperatures during April averaged above normal in practically all cases except at Pembina and Washington, where appreciable negative departures prevailed (table 1). Relative humidity departures for the month were small except at Norfolk, where large positive values obtained in the higher levels.

Resultant free-air wind directions for the month were close to normal in practically all cases. Resultant free-air velocities were mostly above normal except in the west where they were generally less than normal.